

CLAIMS

What is claimed is:

1. A method for treating chronic pain in a mammalian subject comprising the step of administering to a subject in need a therapeutically effective amount of a composition comprising a polypeptide that specifically binds CD11d.
2. The method of claim 1 wherein the said polypeptide is an antibody.
3. The method of claim 1 wherein said polypeptide is a monoclonal antibody.
4. The method of claim 1 wherein said polypeptide is a monoclonal antibody secreted by hybridoma 217L (American Type Culture Collection Accession No: HB-12701), hybridoma 226H (American Type Culture Collection Accession No: HB-12592) or hybridoma 236L (American Type Culture Collection Accession No: HB-12593).
5. The method of claim 1 wherein the polypeptide comprises one, two and/or three complementarity determining region (CDR) of a light chain of monoclonal antibody secreted by hybridoma 217L (American Type Culture Collection Accession No: HB-12701), hybridoma 226H (American Type Culture Collection Accession No: HB-12592) or hybridoma 236L (American Type Culture Collection Accession No: HB-12593).
6. The method of claim 1 wherein the polypeptide comprises one, two and/or three complementarity determining region (CDR) of a heavy chain of monoclonal antibody secreted by hybridoma 217L (American Type Culture Collection Accession No: HB-12701), hybridoma 226H (American Type Culture

Collection Accession No: HB-12592) or hybridoma 236L (American Type Culture Collection Accession No: HB-12593).

7. The method of claim 1 wherein the polypeptide comprises one, two and/or three complementarity determining regions (CDR) of a heavy chain of monoclonal antibody secreted by hybridoma 217L, 226H or 236L and one, two and/or three complementarity determining regions (CDR) of a light chain of monoclonal antibody secreted by hybridoma 217L (American Type Culture Collection Accession No: HB-12701), hybridoma 226H (American Type Culture Collection Accession No: HB-12592) or hybridoma 236L (American Type Culture Collection Accession No: HB-12593).

8. The method of claim 1 wherein polypeptide recognizes an epitope on CD11d recognized by a monoclonal antibody secreted by hybridoma 217L (American Type Culture Collection Accession No: HB-12701), hybridoma 226H (American Type Culture Collection Accession No: HB-12592) or hybridoma 236L (American Type Culture Collection Accession No: HB-12593).

9. The method of claim 1 wherein the polypeptide competes with a monoclonal antibody secreted by hybridoma 217L (American Type Culture Collection Accession No: HB-12701), hybridoma 226H (American Type Culture Collection Accession No: HB-12592) or hybridoma 236L (American Type Culture Collection Accession No: HB-12593), for binding to CD11d.

10. The method of claim 1 wherein the polypeptide comprises one, two, three, four, five and/or six complementarity determining regions of a monoclonal antibody secreted by hybridoma 217L (American Type Culture Collection Accession No: HB-12701), hybridoma 226H (American Type Culture Collection Accession No: HB-12592) or hybridoma 236L (American Type Culture Collection Accession No: HB-12593), said polypeptide selected from the group consisting of a monoclonal

antibody; a polyclonal antibody, a single chain antibody, a chimeric antibody, a bifunctional/bispecific antibody, a humanized antibody, a human antibody, and a complementarity determining region (CDR)-grafted antibody and a peptibody.

11. The method of any one of claims 1 through 10 wherein the mammal is a human.

12. The method of any one of claims 1 through 10 wherein the chronic pain is selected from the group consisting of tactile allodynia, neuropathic pain, hyperalgesia, hyperpathia, and inflammatory pain.

13. The method of claim 12 wherein the chronic pain is tactile allodynia.

14. The method of any one of claims 1 through 10 wherein the chronic pain results from central nervous system trauma or spinal cord injury.

15. The method according to any one of claims 1 through 10 wherein the spinal cord injury is compression of the spinal cord.

16. The method of any one of claims 1 through 10 wherein administration of the composition results in an increase in axon regeneration and/or growth.

17. The method of any one of claims 1 through 10 wherein administration of the composition results in an increase in myelin regeneration.

18. The method of any one of claims 1 through 10 wherein the composition further comprises a pharmaceutically acceptable diluent or carrier.

19. The method of any one of claims 1 through 10 wherein the composition is administered in conjunction with other pain relief medicine.

20. The method of claim 19 wherein the other pain relief medicine is selected from the group consisting of NSAIDs, analgesics, steroids, and anti-epileptic medicines.